UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

750 7590 01/03/2011
PANITCH SCHWARZE BELISARIO & NADEL LLP
ONE COMMERCE SQUARE
2005 MARKET STREET. SHITE 22/00

EXAMINER
ABRAHAM, AMJAD A
ART UNIT PAPER NUMBER

DATE MAILED: 01/03/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/570,232	02/28/2006	Takakuni Ueno 93	369-116US(T37-182370M/A	7539			
TITLE OF INVENTION: OPTICAL 3-DIMENSIONAL OBJECT FORMATION AND DEVICE							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/04/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

PHILADELPHIA PA 19103

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ig the Patent, advance of terwise in Block 1, by (a	rders and notification of a) specifying a new corre	maintenance fees wil spondence address; a	be mailed to the current nd/or (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
	ENCE ADDRESS (Note: Use Bi	ock 1 for any change of address)	Not Fee pap bay	te: A certificate of m (s) Transmittal. This ers. Each additional p e its own certificate of	ailing can only be used for certificate cannot be used I naper, such as an assignment f mailing or transmission.	or domestic mailings of the for any other accompanying int or formal drawing, must
ONE COMMER	RCE SQUARE STREET, SUITE 2	ARIO & NADEL	LLP 15	Certify that this	icate of Mailing or Trans	
FIIILADELFIII	A, FA 19103					(Depositor's name)
						(Signature)
			L			()
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,232 TITLE OF INVENTION	02/28/2006 i: OPTICAL 3-DIMENS	IONAL OBJECT FORM	Takakuni Ueno IATION AND DEVICE	936	0-116US(T37-182370M/A	7539
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/04/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	1		
ABRAHAM	I, AMJAD A	1744	264-401000	-		
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA	nge of Correspondence 'Indication form ed. Use of a Customer 'TO BE PRINTED ON'	2. For printing on the j (1) the names of up to or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atte listed, no name will be THE PATENT (print or ty data will appear on the patents.)	o 3 registered patent vely, le firm (having as a nagent) and the names rneys or agents. If no printed.	nember a 2 of up to name is 3	ocument has been filed for
(A) NAME OF ASSIG	GNEE	eletion of this form is NO	(B) RESIDENCE: (CIT	Y and STATE OR CO	UNTRY)	oup entity 🚨 Government
4a. The following fee(s) Issue Fee Publication Fee (N	vo small entity discount p		A check is enclosed. Payment by credit ca	rd. Form PTO-2038 i	previously paid issue fee s attached. the required fee(s), any de (enclose a	
	s SMALL ENTITY state	s. See 37 CFR 1.27.			ENTITY status. Sec 37 C	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	rired) will not be accepte tes Patent and Trademark	d from anyone other than Office.	the applicant; a regist	ered attorney or agent; or the	ne assignee or other party in
Authorized Signature				Date		
Typed or printed name				Registration No		
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the ONOT SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by the timated to take 12 mi vidual case. Any com er, U.S. Patent and To O THIS ADDRESS.	public which is to file (an nutes to complete, includir ments on the amount of ti ademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/570,232	70,232 02/28/2006 Takakuni Ueno		369-116US(T37-182370M/AI 7539		
570 75	90 01/03/2011		EXAMINER		
PANITCH SCHV	WARZE BELISARIO	ABRAHAM, AMJAD A			
ONE COMMERC		ART UNIT	PAPER NUMBER		
2005 MARKET ST	PREET SHITE 2200				

PHILADELPHIA, PA 19103

1744 DATE MAILED: 01/03/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 560 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 560 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/570.232 UENO, TAKAKUNI Notice of Allowability Examiner Art Unit AMJAD ARRAHAM 1744 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTQL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFB 1.313 and MPEP 1308. This communication is responsive to 12/17/2010. The allowed claim(s) is/are 1,3,4,10,12,13,15,17 and 19. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🖾 All b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) Thereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413). Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

/AMJAD ABRAHAM/ Examiner, Art Unit 1744

of Biological Material

9. Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: See attached form entering after final amendment (Dated 12/17/2010)

Application/Control Number: 10/570,232 Page 2

Art Unit: 1744

REASONS FOR ALLOWANCE

This is a notice of allowance in response to applicant's after-final claim amendments (filed on December 17, 2010) cancelling all subject matter not previous allowed.

- 1. Claims 1, 3-4, 10, 12-13, 15, 17, and 19 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: Kihara (JP 03-281329) the closest prior art on record teaches a stereolithographic method which forms a 3-D object using a planar plotting mask which can be moved as well have the mask image changes simultaneously in order to form a 3D object in which there are no defect lines (boundary defect). Kihara does not expressly teach wherein the light intensity generated by the mask is continuously changed and equalized so that the resin layer that is cured is cured with the same intensity at all points which are projected by the mask. In addition, Kihara does not expressly state wherein adjacent overlapping of curved layers or staggering the position of the plotted light intensity will attenuate possible defects in adjacent plotted layers..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1744

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMJAD ABRAHAM whose telephone number is (571)270-7058. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AAA

/Philip C Tucker/ Supervisory Patent Examiner, Art Unit 1745